TECHNICAL DATA SHEET

TOTAL AW OILS

TOTAL AW OILS are anti-wear hydraulic oils designed for high-pressure hydraulic systems with gear, piston or vane pumps. Using field proven zinc-type anti-wear additive systems, **TOTAL AW OILS** minimize wear in high-pressure vane and gear pumps and are also excellent performers in axial piston pumps using bronze components. **TOTAL AW OILS** have excellent thermal stability and effectively shed water allowing easy drainage of water from machine sumps.

APPLICATIONS

TOTAL AW OILS are recommended for use in mobile, marine and industrial hydraulic systems. **TOTAL AW OILS** meet or exceed the specifications from major pump manufacturers.

TOTAL AW OILS are also recommended for many other applications -- air compressors, industrial gearsets and speed reducers, air line lubricators, machine tool drives, etc. -- where anti-wear rust and oxidation inhibited lubricants are required.

CHARACTERISTICS

- Exceeds specifications from Denison HF-0, HF-1 & HF-2
- Exceeds specifications from Vickers M-2952-S, I-286-S and 35VQ25 for high-sped and high-pressure pump.
- Exceeds specifications from Cincinnati Milacron P-68, P-69 and P-70.
- Exceeds specifications from Racine's variable volume van pump.
- Very good resistance to oxidation.
- Very good thermo-oxidative properties.
- Excellent Demulsibility.
- Excellent resistance to shearing.
- Very good low-temperature properties.
- Multi-purpose usage.

ADVANTAGES

- Lubricant used in the vast majority of pumps and even in systems with "fine filtration" (low micron filters).
- Increases useful life of systems and reduces maintenance fees.
- Enable one to reduce stocks, because they can be used in compressors, hydraulic systems, gears, etc.
- Can be utilized in high-pressure systems (greater than 1000 psi or 7000 kPa).

TOTAL LUBRIFIANTS CANADA INC. 220, Ave Lafleur LaSalle Qc H8R 4C9
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TYPICAL PROPERTIES FOR TOTAL AW OILS

PROPERTIES	ASTM TEST	AW 22	AW 32	AW 46	AW 68	AW 100
Product code	-	T406001	T406002	T406003	T406004	T406005
ISO Viscosity Grade	**D445**	22	32	46	68	100
Viscosity in cSt at 40°C	**D445**	21	32	46	68	102
Viscosity in cSt at 100°C	**D445**	4.2	5.4	6.9	8.7	11.6
Viscosity index, min.	**D2270**	100	100	100	99	99
Density in kg/dm^3 at 15°C	**D1298**	0.87	0.87	0.88	0.88	0.88
Flash Point in °C, minimum	**D92**	208	220	230	234	240
Pour Point in °C	**D97**	-35	-32	-30	-27	-22
Color ASTM, maximum	**D1500**	1.0	1.0	1.0	1.5	1.5
Foaming sequence I, 5 minutes after air injection	**D892**	None	None	None	None	None
Demulsibility, (oil/water/emulsion) in 30 min.	**D1401**	40/40/0	40/40/0	40/40/0	40/40/0	40/40/0
Rust test ASTM, synthetic sea water	**D665B**	Pass	Pass	Pass	Pass	Pass
Oxidation performance, Number of hours before a variation of 2.0 for total acid Number (TAN)	**D943**	2000+	2000+	2000+	2000+	2000+
Copper strip corrosion test, 3 hours at 100°C	**D130**	1a	1a	1a	1a	1a

REMARK: Although the preceding values are typical properties, they do not represent guaranteed characteristics.

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